

Having thus described the preferred embodiment, the invention is now claimed to be:

1. An electric arc engine welder comprising:

a housing having a cavity therein;

an opening defined by the housing and connected to the cavity;

a track member mounted to the housing adjacent the opening, the track member defining at least one slot along a longitudinal extent thereof;

two hooks connected to a door and received in the at least one slot for removably mounting the door to the housing, the two hooks spaced apart from one another a first distance;

two notches defined in the track member and connected to the at least one slot, the two notches spaced apart from one another a second distance that is different than the first distance, the notches allowing the door to be removed from the housing.

2. The electric arc engine welder of claim 1 wherein the door is movable along the track member between a closed position wherein the door obstructs the opening and an open position wherein access to the opening is provided and the door remains mounted to the housing.

3. The electric arc engine welder of claim 1 wherein the track member is oriented such that a longitudinal extent thereof is generally horizontal and the two notches are positioned above the at least one slot.

4. The electric arc engine welder of claim 3 wherein the door is slidable along the at least one slot to a first hook removal position wherein a second hook of the at least two hooks is aligned with a second notch of the two notches and is removable from the at least one slot by passing through the second notch.

5. The electric arc engine welder of claim 4 wherein a first hook of the at least two hooks is not aligned with a first notch of the two notches and is not removable from the at least one slot when the door is in the first hook removal position.

6. The electric arc engine welder of claim 4 wherein the door is slidable along the slot to a second hook removal position wherein a first hook of the two hooks is aligned with a first notch of the two notches and is removable from the at least one slot by passing through the first notch.

7. The electric arc engine welder of claim 1 further including:  
a lock for selectively locking the door in a closed position wherein the door covers the opening.

8. The electric arc engine welder of claim 1 wherein the track member includes a protector along an edge defining the at least one slot for engaging the two hooks.

9. The electric arc engine welder of claim 1 wherein the door is removable from the housing by passing a first hook of the two hooks through a first notch of the two notches and subsequently passing a second hook of the two hooks through a second notch of the two notches.

10. A side door assembly for use on an electric arc engine welder, the side door assembly comprising:

a hanger member mounted on an associated arc engine welder housing;  
first and second hooks each having first ends hooked onto the hanger member and opposite ends connected to a door thereby hanging the door from the hanger member, the hooks slidable on the hanger member to move the door between an open position and a closed position; and

wherein the first hook is removable from the hanger member only when the door is moved to a first hook removal position and the second hook is removable from the hanger member only when the door is moved to a second hook removal position which is spaced apart from the first hook removal position.

11. The side door assembly of claim 10 wherein the hanger member defines at least one slot for receiving the second ends of the first and second hooks.

12. The side door assembly of claim 11 wherein the hanger member defines two notches adjacent the at least one slot for allowing removal of the first and second hooks when the hooks are aligned respectively with the two notches, a first of the two notches aligned with the first hook when the door is in the first hook removal position and the second of the two notches aligned with the second hook when the door is in the second hook removal position.

13. The side door assembly of claim 12 wherein the hanger member is oriented such that a longitudinal extent thereof is generally horizontal and the two notches are located above the at least one slot.

14. The side door assembly of claim 10 further including:  
a lock for locking the door in the closed position.

15. A door assembly comprising:  
a track member defining at least one slot;  
a door slidably movable along the track member;  
a first hook having a first end affixed to the door and a second hooked end received in the slot;  
a second hook having a first end affixed to the door and a second hooked end received in the slot;  
a first notch defined in the track member adjacent the at least one slot for allowing the first hook to be disconnected from the track member when the door is

moved along the track member to a position wherein first hook is aligned with the first notch; and

a second notch defined in the track member adjacent the at least one slot for allowing the second hook to be disconnected from the track member when the door is moved along the track member to a position wherein the second hook is aligned with the second notch, the locations of the first and second notches prevent the first and second hooks from being simultaneously aligned with the first and second notches.

16. The door assembly of claim 15 wherein the first hook is only disconnectable from the track member by passing the first hook second end through the first notch while the door is angled relative to the track member.

17. The door assembly of claim 16 wherein the second hook is only disconnectable from the track member by passing the second hook second end through the second notch while the door is angled relative to the track member.

18. The door assembly of claim 15 wherein the track member includes a protector along at least one edge defining the slot which engages the first and second hooks.

19. The door assembly of claim 18 wherein the protector is made of an ultra low friction material.

20. The door assembly of claim 19 wherein the ultra low friction material is one of polyethylene acetal and Teflon.

21. A door assembly comprising:

a track member mounted to a housing;

a door slidably movable along the track member and adapted to move between an open position and a closed position;

first and second hooks for carrying the door along the track member, the first and

second hooks affixed to the door such that the first hook is spaced apart from the second hook a first distance; and

first and second notches defined in the track member and spaced apart a second distance, the first notch appropriately sized to allow the first hook to be selectively detached from the track member and the second notch appropriately sized to allow the second hook to be selectively detached from the track member, the second distance being unequal to the first distance to prevent simultaneous detachment of the first and second hooks from the track member.